

US EPA RECORDS CENTER REGION 5



560464

**LETTER REPORT
FOR
76TH & ALBANY
CHICAGO, COOK COUNTY, ILLINOIS
TDD: S05-0001-024
PAN: 0J2401SIXX**

May 26, 2000

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency and Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604**

Prepared by: *John Nordline for Ren Bugg* Date: 5/26/00
Ren Bugg, START Project Manager

Reviewed by: *Patrick Zwillig* Date: 5/26/00
Patrick Zwillig, START Assistant Program Manager

Approved by: *Daniel Sewall* Date: 5/26/00
Daniel Sewall, START Program Manager



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May 26, 2000

Ms. Gail Nabasny, START Project Officer
Emergency Support Section
United States Environmental Protection Agency
77 West Jackson Boulevard - HSE-5J
Chicago, Illinois 60604

Re: 76th & Albany
Chicago, Cook County, Illinois
TDD: S05-0001-024
PAN: 0J2401SIXX

Dear Ms. Nabasny:

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) was tasked by the United States Environmental Protection Agency (U.S. EPA) under Technical Direction Document (TDD) S05-0001-024, to assist U.S. EPA On-Scene Coordinator (OSC) Brad Benning with technical support, including documenting site conditions and collecting environmental samples at the 76th & Albany site.

A vacant lot located at 76th and Albany has been used as an illegal dumping ground. The site, which has coordinates of latitude 41°45'20" North and longitude 87°42'08" West, is located at the end of 76th Street, east of the intersection of Albany and 76th Streets in the City of Chicago, Cook County, Illinois (Attachment A, Figure 1). The site is located in a mixed industrial and residential area in the southwest sector of Chicago, and is bordered by a drive-in theater to the east and north; by 77th Street to the south; and by a paved area and Albany Street to the west. There are no permanent structures at the site, which occupies an area of approximately nine acres, or four city blocks. The site is not a secure location, with evidence of habitation by transients noted during the site assessment.

Illegal refuse dumping has occurred on the northern and southern portions of the site. The northern portion of the site contains fill regions of unknown depths. A refuse pile consisting of soil, autofluff (a byproduct of recycling automobiles), and construction debris is also found in the northern part of the site. The southern portion of the site also has a fill area and pile of construction debris. There is established vegetation on both the northern and southern areas of the site.

The nearest surface water body is located approximately 3,500 feet north of the site in Marquette Park. Drinking water for residents of the City of Chicago is supplied from Lake Michigan via pumping stations. There are approximately 24,820 persons living within a one mile radius of the site. No schools or day care facilities were identified within 200 feet of the site's boundaries.

On February 22, 1995, the Illinois Environmental Protection Agency (Illinois EPA) initiated a cooperative effort with the City of Chicago for investigation and enforcement activities at the site. On December 13, 1995, a pre-enforcement conference was held between representatives of Illinois EPA and one potentially responsible party (PRP), the Renella-Palumbo Company, which owns the property adjacent to the west side of the site.

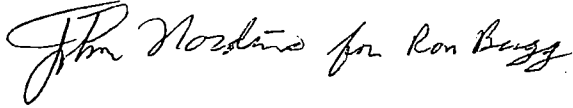
On March 15, 1996, a site assessment was conducted at 76th and Albany by U.S. EPA and START. The assessment included the excavation of eleven test pits; the collection of nine composite soil samples, with six submitted for laboratory analysis; air monitoring; and a site reconnaissance with photodocumentation. Analytical results of the soil samples indicated toxicity characteristic leaching procedure (TCLP) lead concentrations of 19 and 35 milligrams per liter (mg/L) in two samples. These concentrations exceed the regulatory limit of 5 mg/L established for lead by the Resource Conservation and Recovery Act (RCRA). Other RCRA constituents of concern were below regulatory limits. However, Aroclor-1242 was detected in one sample at a concentration of 30 milligrams per kilogram (mg/kg), which exceeds the 25 mg/kg regulatory limit established by the Toxic Substances Control Act (TSCA) for polychlorinated biphenyls (PCBs).

On February 4, 2000, a site assessment was conducted at 76th and Albany by U.S. EPA and START. The City of Chicago Department of Environment was on site to discuss site plans and activities with the U.S. EPA. The assessment included establishing a 300 foot by 300 foot grid with spacing of 50 feet in the area of concern, the southwest corner of the site; the collection of 12 grab soil samples submitted for laboratory analysis; air monitoring; and a site reconnaissance (Attachment A, Figure 2).

All samples were sent to EIS Analytical Services, Inc., South Bend, Indiana, under analytical TDD S05-0001-812 to be analyzed for TCLP RCRA metals, total lead, and PCBs. TCLP RCRA lead was present above the regulatory limit in samples 3-B, 3-E, 4-B, 4-C, 4-D, 5-A, and 5-Y. PCBs were present above the regulatory limit in samples 3-C, 3-G, 4-C, and 5-A. Sample 3-G is a duplicate sample of 3-C. Analytical results are summarized in Attachment B, Tables 1, 2, and 3. Validated analytical reports are presented in Attachment C. It was estimated that 375,000 cubic yards of material are located on-site.

This Letter Report completes the requirements of this TDD. Should you have any questions, please call the Chicago office at (312) 578-9243.

Sincerely,



Ron Bugg
START Project Manager



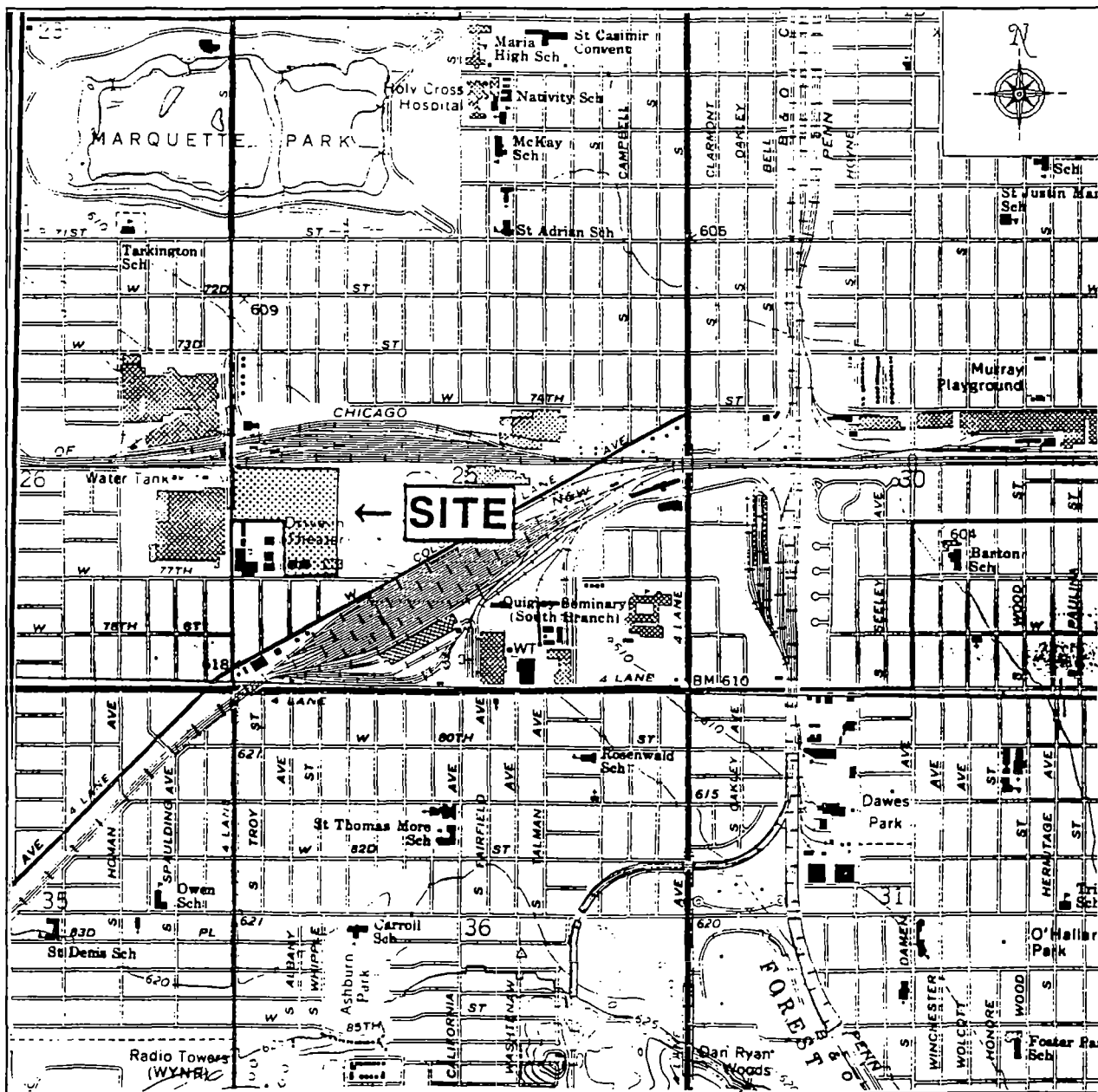
Daniel Sewall
START Program Manager

Attachments: A - Figures
 B - Tables
 C - Validated Analytical Results

cc: Brad Benning, OSC, U.S. EPA
 START File

Attachment A

Figures



Quadrangle Location

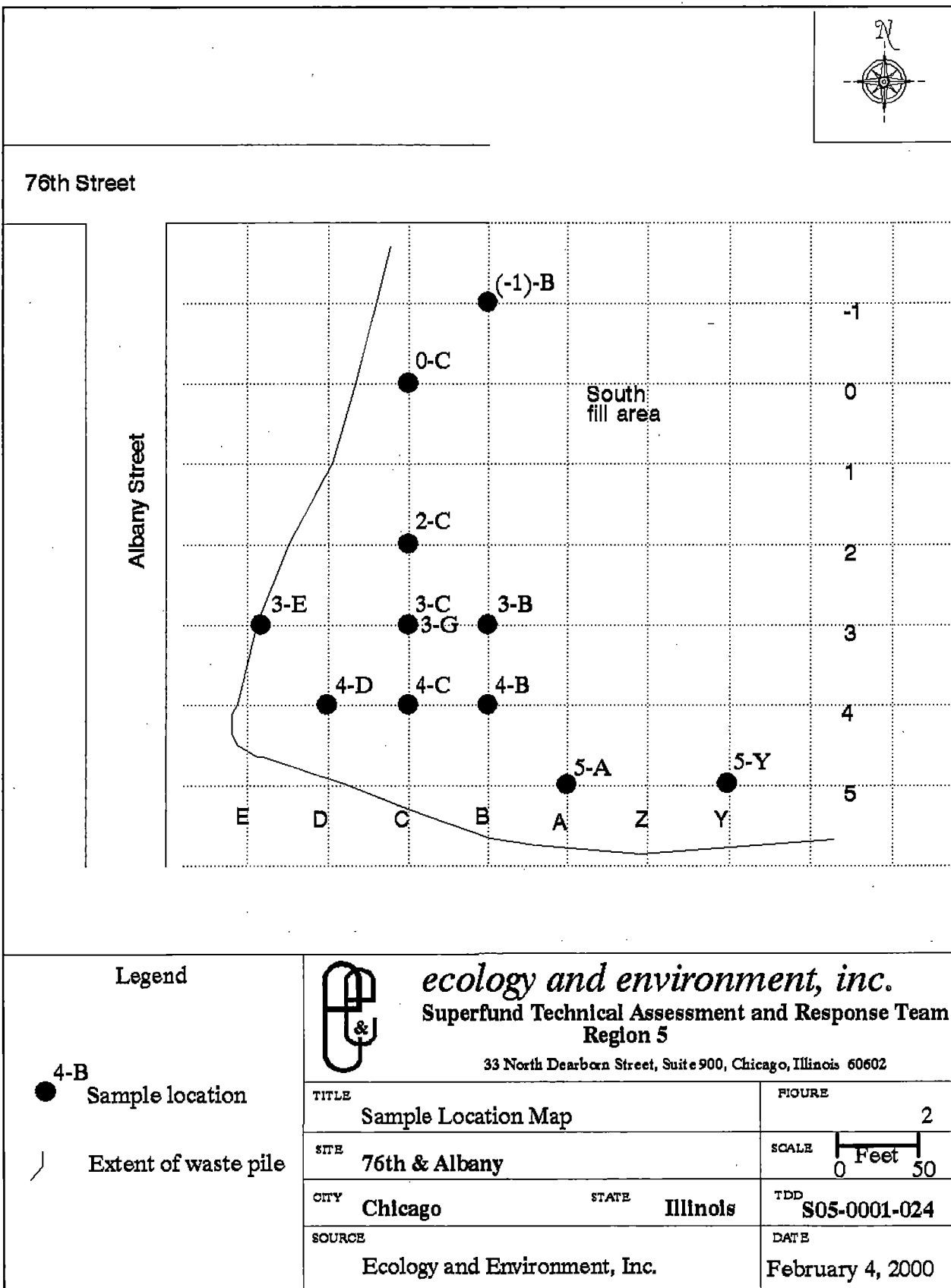


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Superfund Technical Assessment and Response Team
Region 5

33 North Dearborn Street, Suite 900, Chicago, Illinois 60602

TITLE Site Location Map		FIGURE 1	
SITE 76th & Albany		SCALE 1:24,000	
CITY Chicago	STATE Illinois	TDD S05-0001-024	
SOURCE USGS Topographic Map, 7.5 Minute Series Englewood, IL Quadrangle		DATE 1963	REVISED 1980



Attachment B

Tables

<p style="text-align: center;">Table 1</p> <p style="text-align: center;">ANALYTICAL RESULTS FOR TOTAL LEAD 76TH AND ALBANY COOK COUNTY, CHICAGO, ILLINOIS FEBRUARY 4, 2000</p>												
Parameter	Sample Number (mg/kg)											
	(-1)-B	0-C	2-C	3-B	3-C	3-E	3-G	4-B	4-C	4-D	5-A	5-Y
Lead	722	1,870	3,250	2,650	2,580	1,000	2,750	3,580	3,720	2,850	2,840	4,780

Key: mg/kg = Milligrams per kilogram.

Source: EIS Analytical Services Inc., South Bend, Indiana. analytical TDD S05-0001-812.

Table 2

ANALYTICAL RESULTS FOR TCLP RCRA METALS
76TH AND ALBANY
COOK COUNTY, CHICAGO, ILLINOIS
FEBRUARY 4, 2000

Sample Number	Parameters (mg/L)							
	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
(-1)-B	<0.05	1.27	0.07	0.02	0.52	<0.001	<0.05	<0.01
0-C	<0.05	1.64	0.19	<0.01	3.18	<0.001	<0.05	<0.01
2-C	<0.05	2.95	0.31	<0.01	2.74	<0.001	<0.05	<0.01
3-B	<0.05	2.84	0.28	0.01	27.3	<0.001	<0.05	<0.01
3-C	<0.05	3.14	0.22	<0.01	3.75	<0.001	<0.05	<0.01
3-E	<0.05	0.98	0.07	<0.01	5.62	<0.001	<0.05	<0.01
3-G	<0.05	2.64	0.22	<0.01	2.46	<0.001	<0.05	<0.01
4-B	<0.05	2.09	0.18	<0.01	5.53	<0.001	<0.05	<0.01
4-C	<0.05	2.86	0.27	<0.01	7.76	<0.001	<0.05	<0.01
4-D	<0.05	1.52	0.19	<0.01	12.1	<0.001	<0.05	<0.01
5-A	<0.05	1.92	0.18	<0.01	8.56	<0.001	<0.05	<0.01
5-Y	<0.05	0.75	0.09	<0.01	23.8	<0.001	<0.05	<0.01

Key: mg/L = Milligrams per liter.
TCLP = Toxicity characteristic leaching procedure.
RCRA = Resource Conservation and Recovery Act.
< = Less than.
Bold numbers indicate sample exceeded regulatory limits.

Source: EIS Analytical Services Inc., South Bend, Indiana, analytical TDD S05-0001-812.

<p style="text-align: center;">Table 3</p> <p style="text-align: center;">ANALYTICAL RESULTS FOR POLYCHLORINATED BIPHENYLS 76TH AND ALBANY COOK COUNTY, CHICAGO, ILLINOIS FEBRUARY 4, 2000</p>							
Sample Number	Parameters (mg/kg)						
	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
(-1)-B	ND	ND	ND	ND	6.62	6.12	ND
0-C	ND	ND	ND	ND	10.3	10.0	ND
2-C	ND	ND	ND	ND	21.7	21.7	ND
3-B	ND	ND	ND	ND	23.4	22.1	ND
3-C	ND	ND	ND	ND	22.7	25.8	ND
3-E	ND	ND	ND	ND	2.10	2.35	ND
3-G	ND	ND	ND	ND	42.0	40.6	ND
4-B	ND	ND	ND	ND	16.9	23.9	ND
4-C	ND	ND	ND	ND	42.1	48.7	ND
4-D	ND	ND	ND	ND	6.58	9.87	ND
5-A	ND	ND	ND	ND	78.5	120	ND
5-Y	ND	ND	ND	ND	ND	ND	ND

Key: mg/L = Milligrams per kilogram.
 ND = Not detected at the sample detection limit value.
 Bold numbers indicate sample exceeded regulatory limits.

Source: EIS Analytical Services Inc., South Bend, Indiana, analytical TDD S05-0001-812.

Attachment C

Validated Analytical Results



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M E M O R A N D U M

DATE: February 28, 2000

TO: Ron Bugg, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwilling, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Polychlorinated Biphenyls (PCBs), 76th and Albany, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-0001-024 Analytical TDD S05-0001-812
Project PAN 0J2401SIXX Analytical PAN 0JAL01TAXX

The data quality assurance (QA) review of 12 solid samples collected from the 76th and Albany site is complete. The samples were collected on February 4, 2000, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8082.

Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
(-1)B	66004
0-C	66005
2-C	66006
3-C	66007
3-G	66008
4-D	66009
3-E	66010
5-A	66011
5-Y	66012
4-B	66013
3-B	66014
4-C	66015

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on February 4, 2000, extracted on February 8, 2000, and analyzed on February 14, 2000. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Instrument Performance: Acceptable

The chromatographic resolution was adequate in the standard and sample chromatograms. Surrogate retention times were consistent in the samples and standards.

III. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSDs) between response factors were less than 20% for all PCBs.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15%, for detected PCBs.

IV. Blank: Acceptable

A method blank was analyzed with the sample. No target compounds or contaminants were detected in the blank.

V. Compound Identification: Acceptable

The chromatographic patterns of the detected PCBs in the samples matched those of the standards.

VI. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples were above acceptable laboratory limits for some samples, possibly due to PCBs present in the samples; no qualification of data was judged to be necessary.

76th and Albany
Project TDD S05-0001-024
Analytical TDD S05-0001-812
PCBs
Page 3

VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are acceptable for use.



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M E M O R A N D U M

DATE: February 28, 2000

TO: Ron Bugg, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwilling, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Toxicity Characteristic Leaching Procedure (TCLP) Metals and Total Lead, 76th and Albany, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-0001-024 Analytical TDD S05-0001-812
Project PAN 0J2401SIXX Analytical PAN 0JAL01TAXX

The data quality assurance (QA) review of 12 solid samples collected from the 76th and Albany site is complete. The samples were collected on February 4, 2000, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1311, 6010, and 7470.

Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
(-1) B	66004
0-C	66005
2-C	66006
3-C	66007
3-G	66008
4-D	66009
3-E	66010
5-A	66011
5-Y	66012
4-B	66013
3-B	66014
4-C	66015

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on February 4, 2000, and analyzed on February 9 and 15, 2000. Analysis for mercury was performed on February 11, 2000. This is within the 6-month (28 days for mercury) holding time limit.

II. Calibration:

- Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required. The correlation coefficient for mercury exceeded 0.995.

- Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.

SAMPLE RESULTS

Page 2 of 13

CLIENT SAMPLE ID: (-1) B
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066004
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	722	mg/kg(dry)	5	5	ShaneD	2/9/00	6010
Moisture	20.0	%	0.1	0.1	LozanoS	2/16/00	160:3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
PCB (AR1248)	6.62	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
PCB (AR1254)	6.12	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	1	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	1.27	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.07	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	0.02	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Copper, TCLP	0.52	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 0-C
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066005
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	1870	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	23.0	%	0.1	0.1	LozanoS	2/16/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1248)	10.3	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1254)	10.0	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	1.64	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.19	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	3.18	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 2-C
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066006
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	3250	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	31.0	%	0.1	0.1	LozanoS	2/16/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1248)	21.7	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1254)	21.7	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	2.95	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.31	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	2.74	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 3-C
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066007
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	2580	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	34.0	%	0.1	0.1	LozanoS	2/16/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1248)	22.7	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1254)	25.8	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	3.14	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.22	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	3.75	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 3-G
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066008
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	2750	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	31.0	%	0.1	0.1	LozanoS	2/16/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
PCB (AR1248)	42.0	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
PCB (AR1254)	40.6	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	10	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	2.64	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.22	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	2.46	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 4-D
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066009
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	2850	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	21.0	%	0.1	0.1	LozanoS	2/16/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1248)	6.58	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1254)	9.87	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	2	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	1.52	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.19	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	12.1	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 3-E
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066010
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	1000	mg/kg(dry)	5	5	ShaneD	2/9/00	6010
Moisture	19.0	%	0.1	0.1	LozanoS	2/21/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1221)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1232)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1242)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1248)	2.10	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1254)	2.35	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1260)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	0.98	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.07	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	5.62	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 5-A
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066011
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	2840	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	21.0	%	0.1	0.1	LozanoS	2/21/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
PCB (AR1221)	nd	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
PCB (AR1232)	nd	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
PCB (AR1242)	nd	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
PCB (AR1248)	78.5	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
PCB (AR1254)	120	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
PCB (AR1260)	nd	mg/kg(dry)	50	0.5	DavisW	2/15/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	1.92	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.18	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	8.56	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 5-Y
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066012
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	4780	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	18.0	%	0.1	0.1	LozanoS	2/21/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1221)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1232)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1242)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1248)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1254)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
PCB (AR1260)	nd	mg/kg(dry)	0.5	0.5	DavisW	2/15/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	0.75	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.09	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	23.8	mg/L	0.25	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 4-B
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066013
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	3580	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	29.0	%	0.1	0.1	LozanoS	2/21/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1248)	16.9	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1254)	23.9	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	2.09	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.18	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	5.53	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 3-B
CLIENT PROJECT: SO1-0001-812
SAMPLE TYPE: Soil/Sludge/Solid
Date Collected: 2/4/00

Report Date: 2/21/00
EIS Sample No: 066014
EIS Order No: 000200081
Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	2650	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	23.0	%	0.1	0.1	LozanoS	2/21/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1221)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1232)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1242)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1248)	23.4	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1254)	22.1	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
PCB (AR1260)	nd	mg/kg(dry)	4	0.5	DavisW	2/14/00	8082
TCLP METALS							
Arsenic, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	2.84	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.28	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	27.3	mg/L	0.25	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010

SAMPLE RESULTS

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CLIENT SAMPLE ID: 4-C
 CLIENT PROJECT: SO1-0001-812
 SAMPLE TYPE: Soil/Sludge/Solid
 Date Collected: 2/4/00

Report Date: 2/21/00
 EIS Sample No: 066015
 EIS Order No: 000200081
 Date Received: 2/7/00

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Lead, Total	3720	mg/kg(dry)	50	5	ShaneD	2/9/00	6010
Moisture	24.0	%	0.1	0.1	LozanoS	2/21/00	160.3
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
PCB (AR1221)	nd	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
PCB (AR1232)	nd	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
PCB (AR1242)	nd	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
PCB (AR1248)	42.1	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
PCB (AR1254)	48.7	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
PCB (AR1260)	nd	mg/kg(dry)	10	0.5	DavisW	2/15/00	8082
TCLP METALS							
Arsenic, TCLP	<0.01	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Barium, TCLP	2.86	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Cadmium, TCLP	0.27	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Chromium, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010
Lead, TCLP	7.76	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Mercury, TCLP	<0.001	mg/L	0.001	0.001	ShaneD	2/11/00	7470
Selenium, TCLP	<0.05	mg/L	0.05	0.05	ShaneD	2/15/00	6010
Silver, TCLP	<0.01	mg/L	0.01	0.01	ShaneD	2/15/00	6010